

Mining Industry




Why mining is a great market for you


Mining operations run in remote, high-risk, and high-cost environments. Even small inefficiencies can lead to major losses, safety issues, or operational delays. The mining market size has grown steadily in recent years. It will grow from \$1.96 trillion in 2024 to \$2.06 trillion in 2025 at a compound annual growth rate (CAGR) of 4.6%. The growth in the historic period can be attributed to technological advancements, an increase in investments in mining industry





Source: https://www.researchandmarkets.com/report/mining?srsId=AfmBOoohd9D46GyQJzeu4oZ2V8uje45x_cYvuYqKgvvP6NyfsbPyVOVc


Key problems you can solve


- 


No real-time visibility in remote locations
- 


Fuel theft and misuse of heavy vehicles
- 

Safety risks due to harsh terrain and long shifts
- 

Difficulty tracking expensive equipment
- 

Unplanned breakdowns and downtime
- 

Unsafe driving in restricted and hazardous zones
- 

Frequent breakdowns due to rough equipment handling
- 

Lack of centralized reporting across sites

What you can offer with Uffizio



Real-time
vehicle & asset
tracking



Fuel monitoring &
theft detection



Driver behavior &
safety monitoring



Route monitoring &
geo-fencing



SOS & emergency
alerts



Camera / MDVR
integration

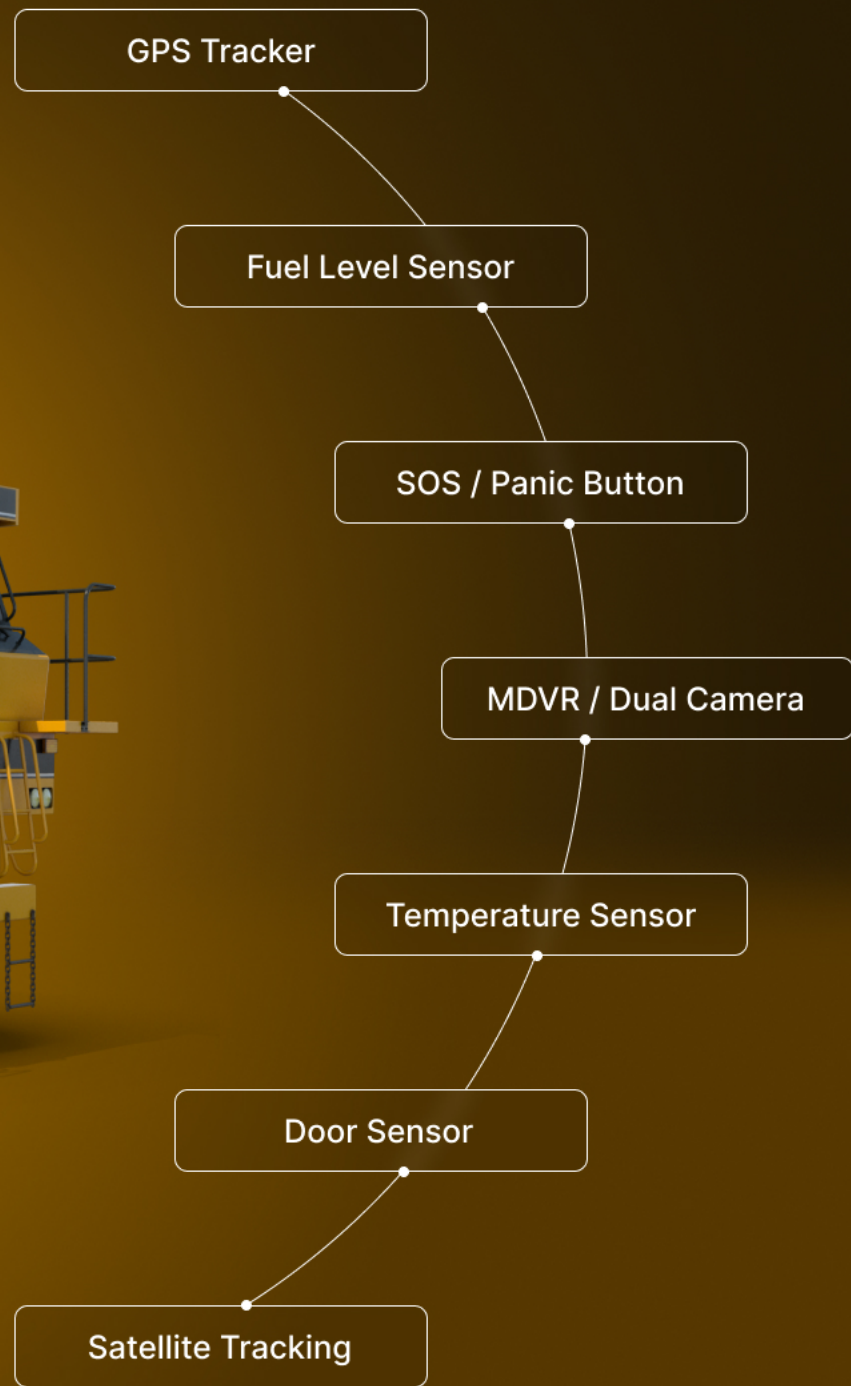


Maintenance &
usage reports

Key benefits that help close deals faster

- ✓ Easy visibility inside mining sites
- ✓ Strong control over fuel and operating costs
- ✓ Clear proof of work done
- ✓ Audit- and compliance-ready data
- ✓ Improved safety in hazardous zones
- ✓ Reduced breakdowns and downtime
- ✓ Better contractor accountability

Hardware used in this Industry



01

USE CASE

Real-time monitoring for mining material movement

In mining sites, dumpers and tippers continuously move ore and overburden between pits, stockyards, and dump zones. Without proper monitoring, operations face fuel loss, low productivity, and disputes with contractors.

This use case shows how Uffizio brings control and visibility to daily material movement.



01 Real-time visibility of individual dumpers

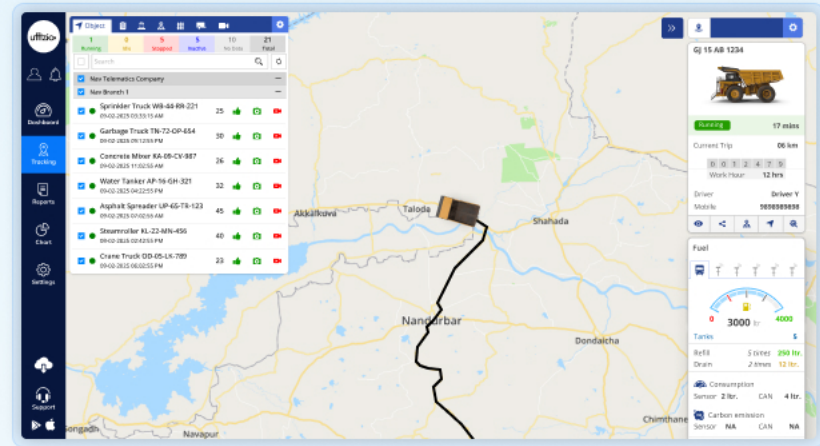
Problem

Supervisors cannot see the real-time movement of a specific dumper once its shift begins.



Solution

Live tracking displays the exact location and movement of the selected dumper in real time.



02 Vehicles move outside approved routes

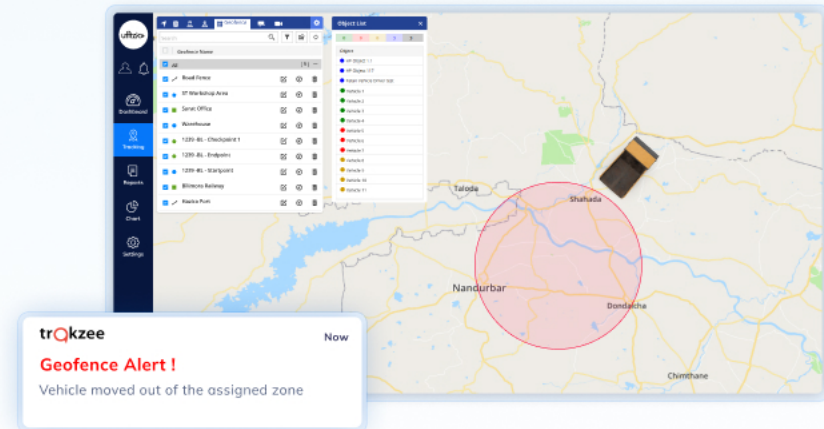
Problem

Supervisors have no visibility when dumpers move away from approved mine roads



Solution

Geofence alerts notify teams when vehicles move outside approved mine roads.



03 Unclear number of trips per shift

Problem

Supervisors don't know how many trips each vehicle actually completes in a shift.



Solution

The object job summary report provides details for trip completed by each vehicle.

Job Summary [01-26-2025 12:00 AM - 01-31-2025 11:59 PM]													
Job Name	Job ID	Approx. Distance	Approx. Total Load (T)	Total Job Cost	Total Jobs	Completed Without Issue	Completed With Issue	Failed	Total Alerts	Object Load State	Document	Total Expense	Representative
Abhay Impex	Load7127	346.0	0.0	0.0	3	0	1	2	2	Loaded	-	0	-

Status	Planned Start Time	Actual Start Time	Difference	Start Odometer	Planned End Time	Work End Time	Actual End Time	Difference	End Odometer	Job Distance	Job Duration	Job Cost	Allocated Points	Visited Points	Missed Points	Alerts	Playback
Completed Without Error	01-26-2025 06:40 PM	01-26-2025 06:38 PM	00:10	4443.51	01-26-2025 06:25 PM	01-26-2025 06:07 PM	01-26-2025 06:07 PM	00:18	4472.51	28.0	01:27	0.0	13	13	0	0	▶
Completed With Error	01-29-2025 06:40 PM	01-29-2025 06:43 PM	00:10	4568.76	01-29-2025 06:25 PM	01-29-2025 07:18 PM	01-29-2025 07:18 PM	00:25	4597.76	28.0	01:29	0.0	13	12	1	0	▶
Completed Without Error	01-30-2025 06:40 PM	01-30-2025 03:28 AM	00:10	4568.82	01-30-2025 06:25 PM	01-30-2025 08:05 PM	01-30-2025 08:05 PM	00:25	4536.82	28.0	01:30	0.0	13	13	0	0	▶
Completed Without Error	01-31-2025 06:40 PM	01-31-2025 03:30 AM	00:10	4564.89	01-31-2025 06:25 PM	01-31-2025 06:18 PM	01-31-2025 06:18 PM	00:07	4591.69	27.0	01:31	0.0	13	13	0	0	▶

Object	Object Brand	Object Model	Object Type	Driver (Based on Allocation Or RFID/ibutton)	Idling Location	Idling Start Time	Idling End Time	Idling Duration	Map				
Simhahevi Sugar Mill Ltd Chikankota BPCL Maghulkarsari	Load719	362.0	0.0	0.0	2	0	0	2	0	Loaded	-	0	-
Simhahevi Sugar Mill Ltd Chikankota BPCL Maghulkarsari	Load798	314.0	0.0	0.0	2	0	1	1	0	Loaded	-	0	-

04 Excessive idle time at loading points

Problem

Dumpers remain idle without reason.



Solution

Idle-time tracking highlights delays instantly.

Idle Details [23-01-2026 12:00 AM - 23-11-2026 11:59 PM]										
Object	Object Brand	Object Model	Object Type	Driver (Based on Allocation Or RFID/ibutton)	Idling Location	Idling Start Time	Idling End Time	Idling Duration	Map	Map
AVI Test 1	General	General	Default	Test Driver 10 AP	Jabrol Mahadev,Jabrol Uttarakhand(SE)	23/01/2026 Am	23/01/2026 Am	00:00:05	▶	▶

Object	Object Brand	Object Model	Object Type	Driver (Based on Allocation Or RFID/ibutton)	Idling Location	Idling Start Time	Idling End Time	Idling Duration	Map
AVI Test 1	General	General	Default	Test Driver 10 AP	2.77 km from Jabrol Mahadev,Jabrol Uttarakhand (SE)	23/01/2026 12:00:00 AM	23/01/2026 12:00:05 AM	00:00:05	▶
AVI Test 1	General	General	Default	Test Driver 10 AP	2.23 km from Jabrol Mahadev,Jabrol Uttarakhand (SE)	23/01/2026 12:00:00 AM	23/01/2026 12:00:05 AM	00:00:05	▶
AVI Test 1	General	General	Default	Test Driver 10 AP	2.28 km from Jabrol Mahadev,Jabrol Uttarakhand (SE)	23/01/2026 12:00:00 AM	23/01/2026 12:00:05 AM	00:00:05	▶
AVI Test 1	General	General	Default	Test Driver 10 AP	2.07 km from Jabrol Mahadev,Jabrol Uttarakhand (SE)	23/01/2026 12:00:00 AM	23/01/2026 12:00:05 AM	00:00:05	▶
AVI Test 1	General	General	Default	Test Driver 10 AP	2.43 km from Jabrol Mahadev,Jabrol Uttarakhand (SE)	23/01/2026 12:00:00 AM	23/01/2026 12:00:05 AM	00:00:05	▶
AVI Test 1	General	General	Default	Test Driver 10 AP	3.4 km from Jabrol Mahadev,Jabrol Uttarakhand (SE)	23/01/2026 12:00:00 AM	23/01/2026 12:00:05 AM	00:00:05	▶
AVI Test 1	General	General	Default	Test Driver 10 AP	4.25 km from Jabrol Mahadev,Jabrol Uttarakhand (SE)	23/01/2026 12:00:00 AM	23/01/2026 12:00:05 AM	00:00:05	▶
AVI Test 1	General	General	Default	Test Driver 10 AP	4.2 km from Jabrol Mahadev,Jabrol Uttarakhand (SE)	23/01/2026 12:00:00 AM	23/01/2026 12:00:05 AM	00:00:05	▶

05 Fuel usage during operations

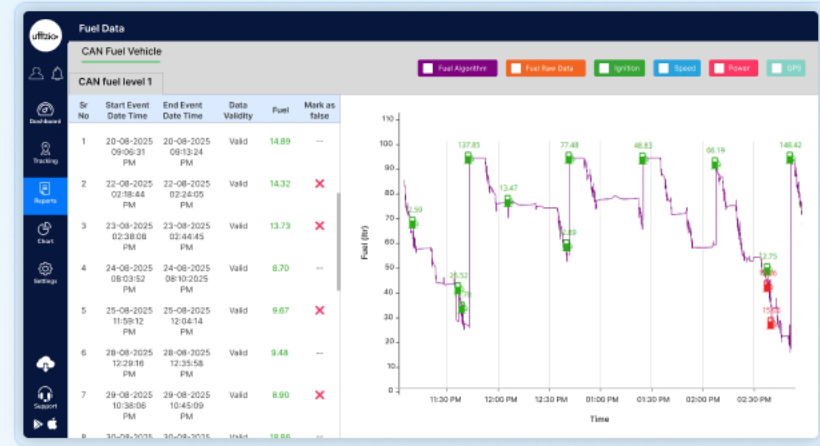
Problem

Fuel usage cannot be justified.



Solution

Fuel monitoring shows actual consumption patterns.



06 Uncontrolled material unloading

Problem

Supervisors don't know where material is unloaded at the end of each job



Solution

The Job Summary Report shows job completion location and stop time, helping verify unloading points

Job Name	Job ID	Approx Distance	Approx Total Load (T)	Total Job Cost	Total Jobs	Completed Without Issue	Completed With Issue	Failed	Total Alerts	Object Load State	Document	Total Expense	Representative			
Abhay Impex	Load7127	346.0	0.0	0.0	3	0	1	2	2	Loaded	--	0	--			
UMA International - UMA International - Abhay Impex From 12823 01-07 08:00:00 To 2025-01-13 11:58:00																
Status	Planned Start Time	Actual Start Time	Difference	Start Odometer	Planned End Time	Work End Time	Actual End Time	Difference	End Odometer	Job Duration	Job Cost	Allocated Pairs	Used Pairs	Mixed Pairs	Alerts	Playback
Completed Without Error	01-28-2025 09:40 PM	01-28-2025 08:30 PM	00:10	4443.51	01-28-2025 08:25 PM	01-28-2025 08:07 PM	01-28-2025 08:07 PM	00:18	4472.51	28.0	01.27	0.0	13	13	0	0
Completed With Error	01-29-2025 09:40 PM	01-29-2025 08:40 PM	00:10	4568.76	01-29-2025 08:25 PM	01-29-2025 07:58 PM	01-29-2025 07:58 PM	00:26	4507.76	38.0	01.23	0.0	13	12	1	0
Completed Without Error	01-30-2025 09:40 PM	01-30-2025 03:30 AM	00:10	4568.82	01-30-2025 08:25 PM	01-30-2025 08:05 PM	01-30-2025 08:05 PM	00:30	4536.82	38.0	01.26	0.0	13	13	0	0
Completed Without Error	01-31-2025 09:40 PM	01-31-2025 03:30 AM	00:10	4564.60	01-31-2025 08:25 PM	01-31-2025 08:18 PM	01-31-2025 08:18 PM	00:07	4591.63	27.0	01.48	0.0	13	13	0	0
Srinivasa Sagar M&L Ltd Chikawla BPCL Maghalsani	Load716	382.0	0.0	0.0	2	0	0	2	0	Loaded	--	0	--			
Srinivasa Sagar M&L Ltd Chikawla BPCL Maghalsani	Load700	314.0	0.0	0.0	2	0	1	1	0	Loaded	--	0	--			

07 Poor control over contractor vehicles

Problem

Contractors and drivers operate without accountability



Solution

Driving behavior reports pinpoint the driver responsible for each violation.

Company	Object	Object Brand	Object Model	Inspection Date	Inspection Type	Inspector Name	Colorator	No Of Issue	Inspection Remark	Object Mode	Acknowledgment By	Inspection Form
Telermaks	MH6R PG 4563	Caterpillar	C3	20-12-2024 16:24	Pre Trip	Wah	5088	1	Condition of the above vehicle is satisfactory	Good to go	-	Download
Telermaks	MH6R RT 1064	Changan	Heavy D	09-12-2024 16:24	Pre Trip	Khalid	19662	2	Above vehicle need to be cancelled for safe operation of vehicle	Good to go	-	Download
Issue Name		Remark		Condition Level		Attachments						
License Plate		-		Good		-						
Mirror		-		Good		-						
Steer And Air Pressure		-		Good		-						
Telermaks	MH6R DC 1223	Caterpillar	C3	20-12-2024 16:24	Pre Trip	Wah	5088	1	Condition of the above vehicle is satisfactory	Good to go	-	Download
Telermaks	Q75 W5 3054	Caterpillar	C3	20-12-2024 16:24	Pre Trip	Deshan	3588	1	Condition of the above vehicle is satisfactory	Good to go	-	Download
Telermaks	MH48 TH 1209	Caterpillar	C3	20-12-2024 16:24	Pre Trip	Jayah	9088	1	Condition of the above vehicle is satisfactory	Good to go	-	Download

08 Rough vehicle handling

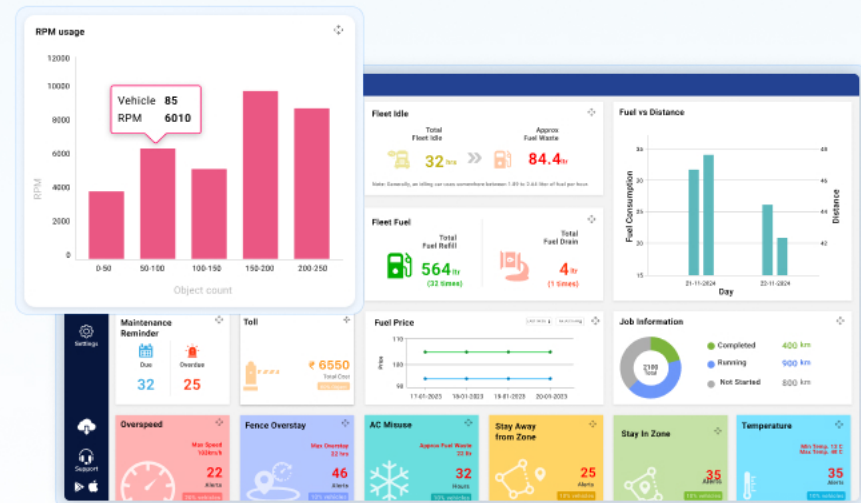
Problem

Overuse damages vehicles.



Solution

RPM monitoring detects harsh usage.



09 No proof for reports and reviews

Problem

Manual logs lack credibility.



Solution

Insightful reports provide data-backed proof.

Company	Object	Object Brand	Object Model	Inspection Date	Inspection Type	Inspector Name	Odometer	No. Of Issue	Inspection Remark	Object Status	Acknowledgement By	Inspection Form
Telematics	MH09 PD 4563	Elcom	C3	20-12-2024 16:24	Pre Trip	Stark	5088	1	Condition of the above vehicle is satisfactory	Good to go	-	Download
Telematics	MH09 RT 1204	Changan	Minor D	20-12-2024 16:24	Pre Trip	Kuhul	10632	2	Minor Defects. Need To be Checked for safe Operation of vehicle	Good to go	-	Download
Issue Name		Remark			Condition Level		Acknowledgement					
License Plate		-			Good		-					
Mirror		-			Good		-					
Tire And Air Pressure		-			Good		-					
Telematics	MH05 DC 1222	Elcom	C3	20-12-2024 16:24	Pre Trip	Stark	5088	1	Condition of the above vehicle is satisfactory	Good to go	-	Download
Telematics	Q715 MS 3024	Elcom	C3	20-12-2024 16:24	Pre Trip	Darshan	5088	1	Condition of the above vehicle is satisfactory	Good to go	-	Download
Telematics	MH08 TH 1120	Elcom	C3	20-12-1824 16:24	Pre Trip	Syrah	9088	1	Condition of the above vehicle is satisfactory	Good to go	-	Download

Result

Better control and higher productivity across daily mining operations.

55%

Improvement in trip productivity

40%

Reduction in idle time

35%

Reduction in fuel-related losses

02

USE CASE

Safety & route compliance inside mining sites

Mining sites are hazardous zones where unsafe driving or route deviation can lead to serious accidents.

This use case shows how Uffizio helps enforce safety, route discipline, and equipment health inside mining operations.



01 Vehicles enter restricted mining zones

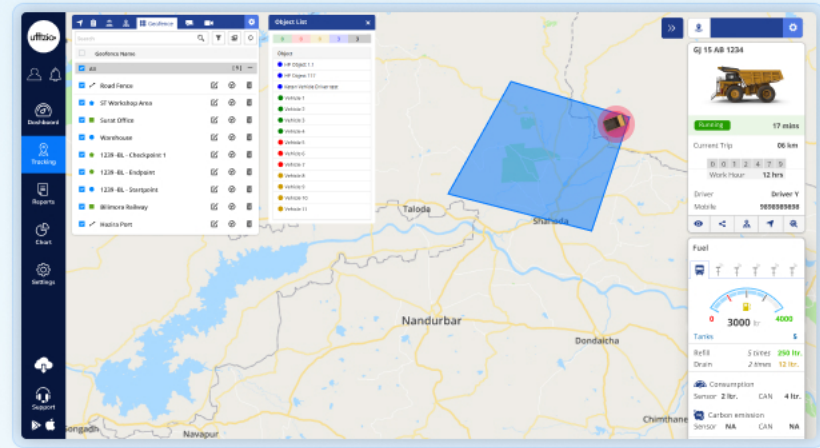
Problem

Supervisors have no visibility when vehicles enter restricted areas.



Solution

Geo-fencing triggers alerts when vehicles enter restricted mining zones.



02 Overspeeding on haul roads

Problem

High-speed driving increases accident risk.



Solution

Speed monitoring triggers instant alerts.



trQkzee

Now

Harsh Acceleration

Braking force exceeded safe limits.

Speed increased from 60 km/h to 90 km/h in 15 seconds.

03 Harsh driving on rough terrain

Problem

Sudden braking and acceleration damage vehicles.



Solution

Driving behavior monitoring improves discipline.



04 Tyre stress during heavy loads

Problem

Tyre failures cause downtime and safety risks.



Solution

Usage patterns and abnormal stoppage alerts detect tyre stress.



05 Unsafe night or low-visibility operations

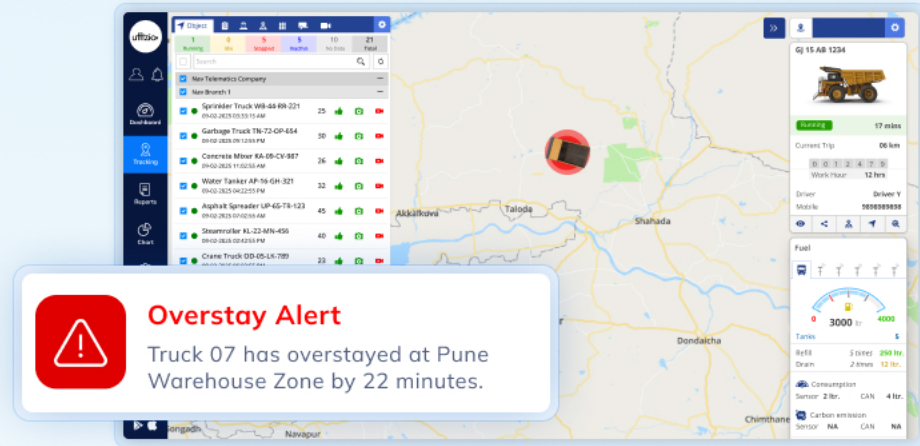
Problem

During night shifts, risky driving or unsafe stoppages are noticed only after an incident occurs.



Solution

Real-time alerts notify supervisors immediately about unsafe movement, long stoppages, or rule violations.



06 No accountability for safety violations

Problem

Violations are difficult to trace.



Solution

Driving behavior reports link each violation directly to the responsible driver of a particular vehicle

Driver	Stance	Planning	AVS	MAZ	Acceleration	Braking	Cornering	Seatbelt	AC Misused	Over Speed	Monday Drive	Night Drive	Mining	Over Stay	ADAS	SMS
Ashish	2911.52	6143	48	131	6	0	1	0	0	15	0	1	1	0	0	0
Bhiva	2967.35	8102	31	124	8	0	1	0	0	1	0	1	0	0	0	0
Bhushan	2511.48	7458	34	132	8	0	0	0	0	2	0	1	1	0	0	0
Ching	2808.26	8011	40	130	8	0	0	0	0	0	0	0	2	0	0	0

Object	Alert Info	Event Date Time	Location
3-94270	Over Speed (Over Speed greater than 120 - 120 Kilometers/h [Limit: 120 Kilometers/h, Duration: 25 Seconds])	14-11-2024 18:25 PM	A-45, Wagle Ind Estate, Road No 10, Thane (West) Mumbai
3-94070	Idle time greater than 90 (1500 Kilometers/h)	15-11-2024 09:07 PM	Gaekwad Nagar, Behar Nagar, Jyotiba Nagar (West) Mumbai
3-94270	Over speed (Over Speed greater than 120 - 124) Kilometers/h [Limit: 120 Kilometers/h, Duration: 25 Seconds]	15-11-2024 04:20 PM	78/13, Nurlappa Road Near Co-Operative Co-Operatives
3-94070	Over speed (Over Speed greater than 120 - 121 Kilometers/h [Limit: 120 Kilometers/h, Duration: 25 Seconds])	15-11-2024 04:01 PM	5/8, Maran Apartment, C.S. Road, Near Wajirawade High School, Dehisar (East)
3-94270	Over speed (Over speed greater than 120 - 121 Kilometers/h [Limit: 120 Kilometers/h, Duration: 25 Seconds])	15-11-2024 04:02 PM	A/1, 2nd Main, New City, Kalyanpalyam Bangalore

07 Frequent breakdowns due to overuse

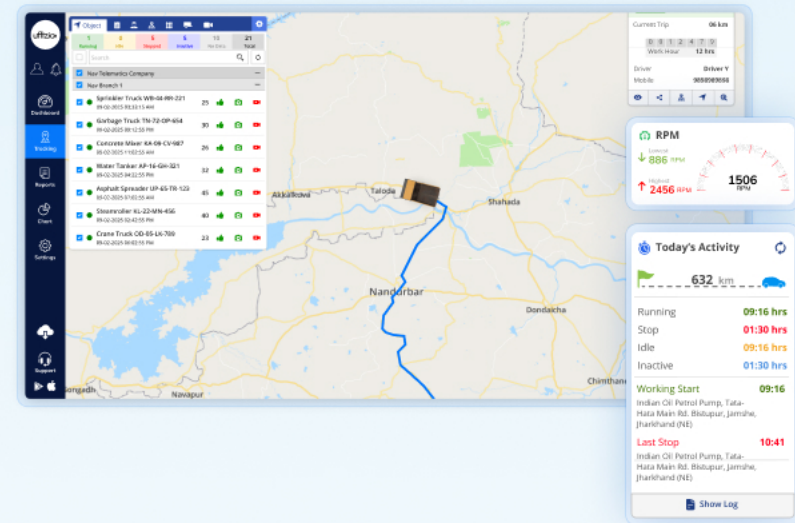
Problem

Machines fail during peak operations.



Solution

RPM and work-hour monitoring prevent overload.



08 Delayed incident response

Problem

Emergency situations are not identified quickly inside mining sites.



Solution

Real-time alerts enable faster awareness and response to on-site incidents.



trQkzee

Now

Emergency Alert Triggered

Immediate action required due to a critical on-site incident.

09 No safety performance data

Problem

Safety reviews are manual and incomplete.



Solution

Driving Behavior Reports and Violation Summary Reports highlight violations, and risks.

The screenshot shows a software interface titled "Violation Summary" with a table of data. The table has columns for various metrics and a "Violation Summary" column. The data is organized into a grid with multiple rows and columns.

Branch	Object	Tempo Score	Strong Presence	Weak Presence	Unintentional Presence	Open Backlog	Start/Stop	Water Movement	Value Assessment	Alert/Dismissal
HP Branch 1	HP Object 10	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Seat Belt Object 9	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Seat Belt Object 8	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Seat Belt Object 7	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Seat Belt Object 6	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Seat Belt Object 5	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Seat Belt Object 4	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Seat Belt Object 3	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Seat Belt Object 2	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Seat Belt Object 1	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 11	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 12	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 13	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 14	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 15	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 16	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 17	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 18	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 19	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 20	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 21	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 22	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 23	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 24	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 25	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 26	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 27	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 28	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 29	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 30	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 31	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 32	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 33	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 34	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 35	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 36	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 37	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 38	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 39	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 40	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 41	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 42	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 43	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 44	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 45	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 46	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 47	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 48	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 49	0	0	0	0	0	0	0	0	0
HP Branch 1	HP Object 50	0	0	0	0	0	0	0	0	0

Result

Safer mining operations with better compliance and fewer incidents.



Reduction in safety violations



Fewer route deviation incidents



Reduction in breakdown-related downtime